



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,380	12/20/2000	Hassan Jomaa	12964.18	2374

7590

07/21/2006

TIM WYCKOFF
HARNESS, DICKEY & PIERCE, P.L.C.
11730 PLAZA AMERICA DRIVE, SUITE 600
RESTON, VA 20190

EXAMINER

CLARDY, S

ART UNIT	PAPER NUMBER
----------	--------------

1617

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Art Unit: 1617

Claims 1-3, 6-8, 17, 21, and new claims 24 and 25 are pending in this application which has been filed under 35 USC 371 as a national stage application of PCT/EP99/04260, filed June 23, 1999. This application has been revived after having abandoned for failure to respond to the office action mailed September 9, 2002.

The application as originally filed lacked unity of invention under 37 CFR 1.475 (MPEP 1850, 1893.03(d)), and was subject to restriction. The previously withdrawn claims have been canceled. All claims are now drawn to the elected invention, comprising:

Group I, claim(s) 1-2, drawn to compositions comprising:

- A. an anti-infectious active agent that inhibits the 2C-methylerythrose-4-metabolic pathway
- B. a lipid metabolism inhibitor

Group VI (and IX), wherein A is a phosphorus (and oxazole) containing compound

Group II, wherein B is a squalene synthase inhibitor

Group XII, drawn to methods of using lipid metabolism inhibitors as herbicides.

The elected species comprises the following active agents:

- A. Alendronate¹: $\text{HO} - \text{C}(\text{PO}_3\text{H}_2)_2 - (\text{CH}_2)_3 - \text{NH}_2$
- B. Fosmidomycin²:

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{O} = \text{CH} - \text{N} - (\text{CH}_2)_3 - \text{P} - \text{OH} \\ | \qquad \qquad | \\ \text{OH} \qquad \qquad \text{OH} \end{array}$$

¹ Alendronic acid: 4-amino-1-hydroxybutylidene-1,1-bisphosphonic acid

² 3-(N-formyl-N-hydroxyamino)propylphosphonic acid

Art Unit: 1617

The rejection of claims 3, 4, 6, and 21 under 35 U.S.C. 101 and 112, second paragraph, is withdrawn in response to applicants' amendment.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 6-8, 17, 21, 24, and 25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8-10, 21 and 22 of U.S. Patent No. 10/363,280. Although the conflicting claims are not identical, they are not patentably distinct from each other because they use derivatives of the same bisphosphonic acid (A) component in combination with fosmidomycin.

Claims 7, 8, and 17 are now objected to because of the following informalities: these claims are multiply dependent on claims which have been canceled. Appropriate correction is required.

Art Unit: 1617

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-8, 17, 21, 24, and 25 are again rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of U Sheffield (PCT WO 97/43437), Teijin Ltd (JP 61-106504, and JPO Abstract), and Kamuro et al (US 4,846,872).

U Sheffield teaches that prenyl transferase and isopentenylpyrophosphate isomerase inhibitors are useful therapeutic agents for bone disease and cancer (abstract). Again, this reference further teaches that inhibitors of lipid metabolism, specifically prenyl transferase (farnesyl pyrophosphate synthase) and isopentenylpyrophosphate isomerase (IPI) inhibitors (p. 18, lines 15-25) such as alendronate (p. 29, lines 1-3; p. 43, "Methods") are useful as fungicides and herbicides (p. 17, lines 4-11; p. 26, line 26 through p. 27, line 3; claim 14). Thus applicants' elected "A" component was a known herbicidal agent, and application of these materials to animals as well as plants was known in the art.

Teijin Ltd, again, teaches that fosmidomycin was also a known herbicidal agent (Abstract and structures on p. 39).

Kamuro et al, again, teach that it was also known to combine fosmidomycin with additional herbicidal agents (col 2, lines 50-53), specifically ametryn and diuron (abstract; column 1, lines 5-41).

One of ordinary skill in the art would be motivated to combine these references because they disclose the herbicidal utility of the elected compounds. It is *prima facie* obvious to

Art Unit: 1617

combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

Thus it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have combined the two known compounds alendronate and fosmidomycin because they are known herbicidal agents. Absent evidence of unexpected results, the combination is obvious. No data has been provided in the specification to demonstrate any unexpected herbicidal characteristics of the elected composition.

Applicant argues that the compositions are patentable because the rejection is based upon their herbicidal utility, while the utility disclosed herein (as well as the bulk of U Sheffield) pertains to pharmaceutical utility. However, for composition claims, the end utility is irrelevant. The prior art suggests that the combination is a useful herbicide. Even if another unrelated utility were to be discovered, the combination itself would remain obvious.

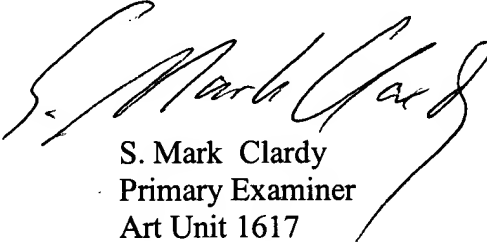
No unobvious or unexpected results are noted; no claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



S. Mark Clardy
Primary Examiner
Art Unit 1617

July 18, 2006